

### **INVESTIGATION 1**

# What do people know about radon?

#### NOTES TO TEACHER

**PURPOSE:** to determine what people know about the radon problem.

#### **MATERIALS:**

- Clipboards
- Pencils
- Graphing paper

#### **BACKGROUND:**

Surveys can provide useful and current information about people's opinions and knowledge about important issues such as air pollution, voter preferences, and, in this case, radon gas. Thetype of survey reported most often in newspapers and on television is the opinion survey. The radon survey used in this investigation can be used to introduce students to radon as well as reinforce important learning process skills including data collection, tabulation, and graphing.

#### **WARM-UP:**

Ask students questions from the section headings of the Background Information on Radon to see what they know about: 1) radioactivity, 2) radon, 3) entry of radon into homes, 4) health effects, and 5) mitigation.

#### **PROCESS SKILLS:**

Science	Mathematics	Social Studies	Social or Group
Communicating Inferring Comparing	Analyzing Investigating	Defining and clarifying problems	Collaborating with others

#### **ACTIVITY SUMMARY:**

#### STEP 1

Students read the fictitious newspaper article entitled, "Levels of Radon in Jersey Town Exceed Limits" to help them get a basic vocabulary started for the terms and concepts related to radon.

#### STEP 2

Students write down and provide definitions for five words that are associated with the word, radon, based on the news article.

#### STEP 3

Students work in groups of 4 or 5 to identify all of the words they don't know from the article. Next, students generate a list of words they would like to share in a definition-giving session.

Note: You might want to send around the room a large sheet of butcher paper for the groups to write something new or different about the article -- either from their own knowledge or from the article. Make sure there are no repeat statements.

#### STEP 4

Students conduct five survey interviews with adults using the Opinion Survey.

Note: Have students consult with their parents prior to initiating their surveys. You might also suggest to them that they consider a telephone survey in lieu of a face to face survey in the community.

#### STEP 5

Students individually mark down the responses from the participants on the tally sheet and display the data as a bar graph.

#### STEP 6

Students write down questions they would like answered about radon gas.

#### MINIMUM RECOMMENDED TIME

It is recommended that you hand out the surveys on a Friday and allow the following week and next weekend for students to collect their survey data.

#### STUDENT RESPONSES

Handout #2

Responses will vary.

Handout #3

Responses will vary.

Handout #4

Responses will vary.

Handout #5

Responses will vary.

#### Handout #6

- 1. Responses will vary.
- 2. Responses will vary.
- 3. Responses will vary.
- 4. Responses will vary.

Handout #8

Responses will vary.

#### **EXTENSION ACTIVITIES**

- 1. Have students determine if a difference exists between male and female responses to the survey. Next, have them graph and evaluate these data.
- 2. Have students create their own survey to determine the opinions of students and parents about other current issues. You may use Handout #7 in this investigation.



## Radon Alert



# Lesson Plan Evaluation Sheet and FREE POSTER AND STORYBOOK offer

The New Jersey Department of Environmental Protection is happy to provide these lesson plans for use by teachers. In order to evaluate the use of the lesson plans, we would greatly appreciate your response to the following questions. All teachers who return these forms will receive a FREE RADON POSTER depicting information about radon in a colorful format and a STORYBOOK about a Native American child and his experience with radon in his home.

1. Which Radon Alert lesson plan(s) did you use?						
2.	How useful did you find it/them (check one) ? Not useful Slightly useful Moderately useful Very useful Extremely useful					
					3. D	you plan to use them again in the future?Yes No
					4. In	your view, what would make the lesson plans MORE useful:
					Vou	name:Phone Number:
					TOU	name i none number
Sub	ect area:Grade:					
Mail	ng address:					
	eceive your FREE RADON POSTER and STORYBOOK, mail or fax this					
	pleted form to:					
	EP Radon Program, P. O. Box 415, Trenton, NJ 08625					
Fax:	<u>609-984-5595</u> .					
	(Questions? Call the Radon Program at 1-800-648-0394.)					